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EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,449

Applicant(s)

MANCHALA ET AL

Examiner

Kaveh Abrishamkar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on June 20, 2005. Claims 1-19 were originally received for consideration. Per the received amendment, claims 1,4,5, and 19 are amended. Claims 1-19 are currently being considered.

Response to Arguments

2. Applicant's arguments filed June 20, 2005 have been fully considered but they are not persuasive because:

Regarding amended independent claim 1, the applicant argues that there is no motivation to combine Foth (U.S. Patent Publication No. 2003/0068045) with McGarvey et al. (U.S. Patent Publication No. 2003/0028773). This argument is not found persuasive. The applicant asserts that there is no need for delegation credentials and that the adaptor communicates directly with the document repository. The Examiner does not find this argument persuasive. The adaptor of Foth, which can be incorporated in the printer, does not communicate directly with the data center (document repository), but it does go through the Internet (Figure 1). McGarvey states that networked computer application are often deployed using a tiered model, which a client model (mobile device) initiates a program via a client program to a web server

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(middle-tier server) which then communicates on behalf of the originator to other middle-tier servers such as database servers or resource managers (document repository) (paragraph 2). The system of Foth as described above, fits into this tiered model, and therefore, it does not teach away from using a delegation credential as the request has to traverse multiple hops through the Internet which is insecure, so a secure propagation of credentials through the multiple hops using a delegation credential would enhance the system of Foth. Therefore, in view of the above reasoning and the reasoning presented in the previous Office action, the rejection is maintained for claims 1-19 as given below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 19 recites the limitation “the document repository” in the first limitation. The preamble discloses a “client-server-document repository system,” but this does not supply sufficient antecedent basis as a system is being disclosed and not the actual document repository. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foth (U.S. Patent Application Publication No. 2003/0068045) in view of McGarvey et al. (U.S. Patent Application Publication No. 2003/0028773).

Regarding claim 1, Foth discloses:

In a client-server-document repository system, a secure method for remote action by reference, comprising:

"sending, from the client to the server, user credentials to release a document stored in the document repository and the address of the document"
(page 2: paragraphs 23-24);

"verifying, at the server, the user's credential" (page 2: paragraphs 23-24);

"if verified, sending, from the server to the document repository, server credentials, and the address of the document" (page2: paragraphs 23-24)

"verifying, at the document repository, the server's credentials" (page 2: paragraphs 23-24);

"if verified, sending the document from the document repository to the server" (page 2: paragraph 24); and

“performing the action on the document at the server” (page 2: paragraph 24).

Foth does not explicitly disclose the method of ***“using a delegation credential in conjunction with user and server credentials to permit the server to perform an action on the document”***. McGarvey discloses using a delegation credential in conjunction with user and server credentials to permit the server to perform an action on the document (page 4-5: paragraphs 45-52). McGarvey delineates a client sending a signed credential to a middle-tier server (server), which then sends the credential to a back-end server (document repository) for authentication on behalf of the client.

McGarvey states that tiered network approaches are common, whereby in a tiered approach, the originator for a unit of work communicates via a client program, which then communicates with a middle-tier server (i.e. a web server) which then can access a database or other resource managers (i.e. document repository) (page 1: paragraph 2). McGarvey further states that “such a tiered approach to network applications may create a need for the secure propagation of security credentials of the request originator through each of the tiers of the application” (page 1: paragraph 3) and that “in such propagation of secure credentials, the request originator delegates to middle-tier servers the authority to access other servers on their behalf” (page 1: paragraph 3).

Foth and McGarvey are analogous arts in that both deal with a tiered approach to access information from a back-end server (document repository) by going through a middle-tier server. The middle-tier server as applied to Foth would be the printer with

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the built in adaptor, and the back-end server would be the document repository where the document that is requested to be printed resides. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delegation credentials provided by McGarvey in conjunction with the user and server credentials of Foth, to allow the propagation of security credentials by allowing the middle-tier server to act on behalf of the client in accessing the back-end servers.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein "***the server comprises a printer***" (page 2: paragraph 20).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein "***the server comprises a multi-function device for printing, faxing and scanning***" (page 2: paragraph 20).

Claim 4 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, further comprising "***establishing a secure connection between the client and server prior to sending the user credentials, delegation credential and address of the document***" (page 2: paragraph 21).

Claim 5 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein "***the document address comprises a URL***"
(page 2: paragraph 23).

Claim 6 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein the delegation credential comprises:

"***URL of the server***" (page 2: paragraphs 23-24);

"***URL of the document to be fetched***" (page 2: paragraphs 23-24);

Foth does not explicitly disclose a certificate signed by the client, the delegator, delegatee, and the access rights delegated to the server. McGarvey discloses a credential which has a pre-nonce token which contains the identity of the middle-tier server (page 4: paragraph 47), a nonce signed by the client (digital certificate), and a random number which can be used for designating the rights of the server by containing an expiration date (pages 4-5: paragraphs 47-52).

Claim 7 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein the client comprises "***a mobile device***" (page 2: paragraph 21).

Claim 8 is rejected as applied above in rejecting claim 7. Furthermore, Foth discloses:

The method of claim 7, wherein the mobile device comprises "***a PDA***" (page 2: paragraph 21).

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Claim 9 is rejected as applied above in rejecting claim 7. Furthermore, Foth discloses:

The method of claim 7, wherein the mobile device comprises "***a cell phone***"

(page 2: paragraph 21).

Claim 10 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1.

Foth does not explicitly disclose the delegation credential including a time limit, wherein upon expiration of the time limit, the server's permissions expire. McGarvey discloses a random number, which has an expiration date, and at the back-end server, if it is determined that the random number received from the middle-tier server is expired, the delegation credential is not authenticated.

Claim 12 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1.

Foth does not explicitly disclose that the delegation credential comprises a Satchel token. McGarvey discloses that the delegation credential includes a pre-nonce token which is used for authenticating to a back-end server.

Claim 13 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1.

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Foth does not explicitly disclose that the delegation credential comprises an SPKI certificate. McGarvey discloses that the delegation credential includes a nonce signed digitally signed by a user.

Claim 14 is rejected as applied above in rejecting claim 1. Furthermore, Foth discloses:

The method of claim 1, wherein "***the server comprises a printer***" (page2: paragraph 20) and the action comprises "***printing the document***" (page 2: paragraph 24) and wherein the verifying step comprises "***verifying if the client has rights on the printer and if not sending an error message to the client***" (page 2: paragraph 23).

Claim 15 is rejected as applied above in rejecting claim 14. Furthermore, Foth discloses:

The method of claim 14. Foth does not explicitly state "verifying, at the printer, if sufficient media is available." However, it was well-known in the art at the time the invention was made, that every time a print job is sent to a printer, that the printer checks if it has sufficient memory to process the request. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to check for sufficient media before commencing the print job.

Claim 16 is rejected as applied above in rejecting claim 15. Furthermore, Foth discloses:

The method of claim 15. Foth does not explicitly disclose "upon printing the document, sending the client a notice." However, it was well-known in that art at the time of invention was made, that when a print job is completed, a notice will be sent to the client. Foth discloses a "secure retrieval of documents" (Abstract) which would imply that a user would know exactly when the print job was completed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have the server send the client a notice when printing had completed.

Claim 17 is rejected as applied above in rejecting claim 3. Furthermore, Foth discloses:

The method of claim 3, wherein "***the delegation credential includes the client's access rights associated with the document and constraints on the server***" (page 2: paragraph 23).

Claim 18 is rejected as applied above in rejecting claim 17. Furthermore, Foth discloses:

The method of claim 17, wherein "***the client's access rights include printing, faxing, copying, and fetching***" (page 2: paragraph 23-24).

Foth does not explicitly disclose the server's constraints include a predetermined number of copies that may be made and a predetermined period of time in which actions on the document maybe provided." McGarvey discloses a random number, which has an expiration date, and at the back-end server, if it is determined that the

random number received from the middle-tier server is expired, the delegation credential is not authenticated.

Regarding claim 19, Foth discloses:

In a client-server-document repository system, a secure method for remote action by reference, comprising:

“sending, from the client to the server, user credentials to release a plurality of documents stored in the document repository and the address of the document” (page 2: paragraphs 23-24);

“verifying, at the server, the user's credential” (page 2: paragraphs 23-24);

“if verified, sending, from the server to the document repository, server credentials, and the address of the document” (page 2: paragraphs 23-24)

“verifying, at the document repository, the server's credentials” (page 2: paragraphs 23-24);

“if verified, sending the document from the document repository to the server” (page 2: paragraph 24); and

“performing the action on the document at the server” (page 2: paragraph 24).

Foth does not explicitly disclose the method of ***“using a plurality of delegation credentials in conjunction with user and server credentials to permit the server to perform an action on the document on the user's behalf”***. McGarvey discloses using a delegation credential in conjunction with user and server credentials to permit the server to perform an action on the document (page 4-5: paragraphs 45-52).

McGarvey delineates a client sending a signed credential to a middle-tier server (server), which then sends the credential to a back-end server (document repository) for authentication on behalf of the client. A plurality of credentials can be sent if there is a plurality of documents that need to be retrieved. McGarvey states that tiered network approaches are common, whereby in a tiered approach, the originator for a unit of work communicates via a client program, which then communicates with a middle-tier server (i.e. a web server) which then can access a database or other resource managers (i.e. document repository) (page 1: paragraph 2). McGarvey further states that "such a tiered approach to network applications may create a need for the secure propagation of security credentials of the request originator through each of the tiers of the application" (page 1: paragraph 3) and that "in such propagation of secure credentials, the request originator delegates to middle-tier servers the authority to access other servers on their behalf" (page 1: paragraph 3). Foth and McGarvey are analogous arts in that both deal with a tiered approach to access information from a back-end server (document repository) by going through a middle-tier server. The middle-tier server as applied to Foth would be the printer with the built in adaptor, and the back-end server would be the document repository where the document that is requested to be printed resides. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the delegation credentials provided by McGarvey in conjunction with the user and server credentials of Foth, to allow the propagation of security credentials by allowing the middle-tier server to act on behalf of the client in accessing the back-end servers.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foth (U.S. Patent Application Publication No. 2003/0068045) in view of McGarvey et al. (U.S. Patent Application Publication No. 2003/0028773) and further in view of Taniguchi et al. (U.S. Patent 6,801,962).

Claim 11 is rejected as applied above in rejecting claim 1. The Foth-McGarvey combination does not explicitly teach that a delegation credential is used for authorizing payment for the action, sending the delegation credential to a payment provider, and verifying the credentials at the payment provider. Taniguchi discloses a mobile device in communication with a server, whereby the user authenticates to the server, and a print job is processed by request from the user, and the printing of the document is charged allowing a user to "make use of a pay print service utilizing the portable terminal device at an arbitrary place where the image forming device is provided" (column 2 lines 20-43). The Foth-McGarvey combination teaches sending a delegation credential from a client to a server, and sending a delegation credential from a middle-tier server to a back-end server, and verifying the delegation credential and the server credential at the back-end server. Foth-McGarvey and Taniguchi are analogous arts as all deal with servers, and Taniguchi deals with printing using a mobile device in the same manner as Foth. It is obvious that the back-end server can be a billing server (payment provider), and the user can delegate the server to act on its behalf using the same logic described in rejecting claim 1, to provide payment. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use

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the payment process disclosed by Taniguchi in conjunction with the system of Foth-McGarvey to allow a user to "make use of a pay print service utilizing the portable terminal device at an arbitrary place where the image forming device is provided" (Taniguchi, column 2 lines 20-43).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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